

**Environmental Management Consolidated Business Center (EMCBC)
Criteria, Review, and Approach Documents (CRAD)
Evaluating Contractor Assurance Systems
Objectives and Criteria**

Contractors must have an operational and effective Contractor Assurance System (CAS) to meet the Office of Environmental Management (EM) expectations and enable effective and efficient line oversight by EM. This section describes the critical attributes of a CAS and provides the objectives, criteria and lines of inquiry that should be used to evaluate the implementation and effectiveness of a CAS.

Element 1- Assessments

Element Objective

The Contractor uses a robust and effective, risk-informed approach to develop, implement, and perform comprehensive assessments of all facilities, systems, and organizational elements, including subcontractors, on a recurring basis.

The Contractor uses a method for validating the effectiveness of assurance system processes (i.e., Third party audits, peer reviews, independent assessments, and external certifications).

Implementation Criteria

- The processes used to implement the elements described in a Contractor's CAS description document are sufficiently defined that they can be executed in a repeatable and predictable manner.
- The processes are being used in the specified manner by the Contractor's functional and organizational segments.
- The scope and frequency of assessments are specified in Site plans and program documents and ensure that:
 1. Assessments required by applicable DOE directives are being performed;
 2. The effectiveness of safety management programs, including programs that are credited in the safety basis for nuclear facilities are being assessed adequately;
 3. Deficiencies are being self-identified; and corrective actions are being taken in a timely and effective manner.
- The contractor has established formal programs to use the results of assessments to foster continuous improvement.

Implementation Lines of Inquiry

- How do you know that assessments will be planned and performed in a reliable and predictable manner across the organization?
- How do you know that assessments will be planned and performed in a manner that is consistent with the risks and performance uncertainties related to the organization's mission objectives and contractual requirements?

- How do you know that the assessment planning and performance processes are maintained consistent with changing organizational needs?
- What defines which functions and parts of the organization should be performing assessments?
- How would you know that the defined functions and/or parts of the organization are performing assessments as expected?
- How do you know that your assessments are providing you results that provide an accurate reflection of performance?
- How do you know that the assessment planning and performance processes are appropriately integrated with other CAS elements and management systems?
- How do you know that all assessments required by DOE Orders are being performed?
- What are the requirements for assessing the effectiveness of safety management programs?
- How do you know that safety management programs are adequately assessed?

Implementation Review Approach

- Review the Contractor's contract, CAS description document, and assessment planning and performance procedures and records.
- Review Contractor assessments including planning, implementation and results.
- Interview Contractor line and support (including independent oversight) managers.
- Observe performance of one or more Contractor assessments.

Effectiveness Criteria

- Results of contractor assessments align and resonate with those resulting from third party, independent, and/or Federal assessments of similar functions.
- When results differ between contractor assessments, other similar EM or external assessments, the contractor proactively probes to understand why these differences exist and how best to resolve them.
- The Assessment program measures the degree to which the elements described in a contractor's CAS description document are demonstrating the desired outcomes, and provides a basis for demonstrating long-term performance levels and/or trends in evidence.
- The Assessment program is designed to identify implementation gaps that should preclude a CAS from being deemed effective.

Effectiveness Lines of Inquiry

- Are assessments being planned as expected? How do you know?
- Are there frequency, cycle time, or quality expectations that apply to assessment planning? If so, how do you know how well you are performing against them?
- Are assessments being performed as expected?
- Are there frequency, cycle time, or quality expectations that apply to assessments planning? If so, how do you know how well you are performing against them?

- Is assessment data reliably translated into actionable information? How do you know?
- Is assessment data adequately transparent to DOE elements and corporate governance? How do you know?
- Are assessments reliably finding issues before they are identified by external assessors and before they become problems? How do you know?
- How do the results of your assessments compare to those of audits and assessments from DOE or other external parties? What do you do if there is disagreement between internal and external assessment results?
- What does the Contractor do when there is a difference in their assessment results as compared to similar EM or external assessments?
- Has the CAS been modified based on implementation gaps identified by assessments?

Element 2 – Programs

Element Objective

Formal programs are established and effectively implemented to collect, analyze, and use information from operational events, accidents, and injuries in order to prevent them in the future.

Continuous feedback and improvement that includes worker feedback mechanisms; improvements to work planning and hazard identification activities; and lessons learned programs.

Implementation Criteria

- The processes used to implement the elements described in a Contractor's CAS description document are sufficiently defined that they can be executed in a repeatable and predictable manner.
- The contractor establishes and implements processes to solicit feedback from workers and work activities.
- Formal programs are established to communicate lessons learned during work activities, process reviews, and event analyses to potential users and applied to future work activities.
- The contractor identifies, applies and exchanges lessons learned with the rest of the DOE complex.
- The contractor review and applies lessons learned identified by other DOE organizations and external sources to prevent similar occurrences.

Implementation Lines of Inquiry

- How is the sharing of operating experience information integrated with other CAS elements and management systems?
- How do you know that relevant lessons learned are collected and shared in a reliable and predictable manner across the organization and with the DOE?

- What defines which functions and parts of the organization should be sharing and acting upon lessons learned?
- How would you know that the defined functions and/or parts of the organization are using lessons learned as expected?

Implementation Review Approach

- Review the Contractor's CAS description document and operating experience identification, screening, evaluation, and dissemination procedures and records.
- Interview Contractor line managers, support managers, and staff.

Effectiveness Criteria

- The Lessons Learned processes are being used in the manner specified by the contractor's functional and organizational segments.
- There is objective evidence that experience from operational events is being tracked and used to drive continuous improvement.

Effectiveness Lines of Inquiry

- Are lessons learned being collected and shared as planned? How do you know?
- Are lessons learned being acted upon as planned? How do you know?
- Are there frequency, cycle time, or quality expectations that apply to lessons learned processing? If so, how do you know how well you are performing against them?
- Is feedback and information from accident, event, and incident reporting and worker feedback processes being used to help identify opportunities for risk reduction and performance improvement? How do you know?

Element 3 – Issues and Corrective Action Management

Element Objective

The Contractor ensures that a comprehensive, structured issues management system is in place. This system uses a risk-informed approach to provide for the timely and effective resolution of deficiencies and is an integral part of the CAS.

Implementation Criteria

- Formal issues and corrective action management processes exist that apply to all areas covered by the CAS.
- Analysis of operational events, accidents, and injuries reliably identify causes and extent of condition, and resulting corrective actions are sufficient to prevent recurrence or improve performance.
- The issues management system ensures that issues are evaluated and graded, and made visible to management using a risk informed approach

- The corrective action management system ensures that issues are evaluated and graded, and made visible to management using a risk informed approach
- The corrective action management system ensures management level attention and by-in graded to issue significance
- Roles and responsibilities with respect to issues and corrective action management are clearly identified
- Requirements and processes for closure of issues are clearly defined and include sufficient independence requirements to assure adequacy
- Issues and corrective action management are fully integrated into the CAS
- CAS is continuously evaluated for effectiveness to ensure long-term sustainability stewardship of the site

Implementation Lines of Inquiry

- How do you know that issues are identified and translated into corrective actions in a reliable and predictable manner across the organization?
- How do you know that corrective actions will reliably and predictably resolve the issues with which they are associated?
- How do you know that issues and corrective actions are prioritized in a manner that is consistent with the organization's mission objectives and contractual requirements and EM expectations?
- How do you know that the issues and corrective action management processes are maintained consistent with changing organizational needs?
- What defines which functions and parts of the organization should be formally managing issues and corrective actions?
- How do you know that the issue and corrective action management processes are appropriately integrated with other CAS elements and management systems?

Implementation Review Approach

- Review the Contractor's CAS description document and issues and corrective action management procedures and records.
- Review event analysis records for effectiveness of analysis in identifying corrective actions to prevent recurrence and improve performance.
- Interview Contractor line managers, support managers, and staff.

Effectiveness Criteria

- Repeat event trends are declining and performance measures show overall improvement.
- Issues raised during recent internal and external review have been captured accurately in the issues management system; no issues are unaccounted for
- Corrective action in the corrective action system are appropriate for the issues raised and are documented sufficiently using a graded approach
- Closure packages are complete and consistent with closure requirements

- Objective evidence exists of appropriate levels of management attention for open issues and appropriate management involvement in issues closure

Effectiveness Lines of Inquiry

- How does management assess the adequacy of CAS performance?
- Are issues being identified as planned or expected? How do you know?
- Are issues being translated into corrective actions as planned or expected? How do you know?
- How is causal analysis used, where appropriate, in this process? How do you know?
- Are issues and corrective actions being managed across functions and sub-units of the organization as expected?
- Are there frequency, cycle time, or quality expectations that apply to issue processing? If so, how do you know how well you are performing against them?
- Are there frequency, cycle time, or quality expectations that apply to corrective action development and management? If so, how do you know how well you are performing against them?
- Is issue and corrective action management data transparent to DOE and corporate governance? How do you know?
- Are issues being effectively resolved? How do you know?

Element 4 – Performance Measures/Continuous Improvement

Element Objective

The Contractor identifies monitors and analyzes data measuring the performance of facilities, programs, and organizations. The data are used to comprehensively demonstrate all aspects of performance with projected future trends.

Timely and appropriate communication to the Contracting Officer which includes electronic access of assurance-related information available to appropriate DOE staff.

Implementation Criteria

- The contractor has established performance measures to be analyzed and trended.
- Performance measures correspond to the areas important to management and include metrics that are graded in detail using a risk-informed approach for each area
- The contractor has processes and procedures in place to capture performance data and provide the data in a timely and effective manner
- Processes and procedures exist for analyzing the data and providing the results to management in a usable form
- Sufficient performance measures are keyed to support contractual performance evaluation
- Objective evidence exists that management needs for performance data have been assessed and that the performance measures support management needs

- The contractor has established formal programs to use the results of performance measures to foster continuous improvement
- Translation of performance evaluations into improvement measures is documented and visible
- Performance information is considered in allocating resources, establishing goals, identifying performance trends, identifying potential problems, and applying lessons learned and good practices

Implementation Lines of Inquiry

- How do you know that outcome measures and their performance targets are selected consistent with the organization's mission objectives, contractual requirements, and customer expectations?
- How do you know that the established suite of outcome measures are effective indicators of desired performance?
- How do you know that the performance measures and their performance targets aid early identification of issues to management and support continuous improvement?
- How are strategic needs considered when selecting measures and setting performance targets?
- How is benchmarking of key functional areas used?
- How do you know that a sufficient and reliable collection of leading indicators is selected for outcome measures?
- How does management know if the performance measures provide timely information to guide actionable decision-making?
- How do you know if the performance measures currently implemented are sufficient for the needs of management?
- What defines which functions and parts of the organization should be selecting and using outcome measures and leading indicators? How do you know that they are doing so?
- How do you know that measures are appropriately integrated with other CAS elements and management systems?

Implementation Review Approach

- Review the Contractor's contract, CAS description document, and performance measures selection and integration procedures and records.
- Review the Contractor's measures that are used by line and support managers.
- Interview Contractor line managers, support managers and staff to assess the efficacy of the CAS.

Effectiveness Criteria

- Performance areas identified by Management have been tracked and analyzed
- Managers at appropriate levels rely on performance measures to monitor performance and support management decision making
- Performance analysis has been provided to management in a timely manner

- The results of external assessments are consistent with contractor performance assessment measures; inconsistencies are evaluated

Effectiveness Line of Inquiry

- Are the measures selected effective in meeting their purpose? How do you know?
- Are measures being used by managers to evaluate organizational and functional performance? How do you know?
- Are the measures being kept current with the changing organization needs?
- Are there frequency, cycle time, or quality expectations that apply to measures planning? If so, how do you know how well you are performing against them?
- Are measures providing timely data for decision-making?
- Are performance levels and trends reliably translated into actionable information? How do you know?
- Are measures adequately transparent to DOE elements and corporate governance (Good governance creates a strong future for an organization by continuously steering towards a vision and making sure that day-to-day management is always lined up with the organization's goals. At its core, governance is about leadership.)? How do you know?
- Are measures reliably finding issues before they are identified by external assessors and before they become larger problems? How do you know?